

KWOK  
"Meltblowing Method and Apparatus"  
Atty. Docket No. 8010-61

New Continuation Application

Page 15, line 27, delete "3-5" and insert -- 3a-3t, 3z, 4a-4f and 5 --; and

Page 19, line 21, after "produce" delete "a".

In The Claims:

Cancel Claims 1- 47 without prejudice.

Add the Following New Claims:

<sup>48</sup>  
119. A meltblowing system comprising:

a body member having a plurality of first fluid orifices, the body member having a plurality of second fluid orifices, each first fluid orifice flanked on substantially opposing sides by two separate second fluid orifices,

the plurality of first fluid orifices and the plurality of second fluid orifices formed by respective corresponding fluid conduits disposed non-convergently in the body member;

a plurality of filaments, each filament emanating from a corresponding one of the plurality of first fluid orifices, the plurality of filaments each having a predominant vacillation amplitude between the two second fluid orifices on substantially opposing sides of the corresponding first fluid orifice.

<sup>49</sup>  
120. The system of Claim 119, the plurality of first fluid orifices protruding relative to the plurality of second fluid orifices.

S0

H8

121. The system of Claim 119, two portions of the body member proximate each first fluid orifice devoid of fluid orifices, the two portions of the body member devoid of fluid orifices disposed symmetrically on substantially opposite sides of the corresponding first fluid orifice between the two second fluid orifices on substantially opposite sides thereof

Rule  
126  
A2  
cont

S1

122. A meltblowing system comprising:

a meltblowing apparatus;

a moving substrate adjacent the meltblowing apparatus; and

a filament between the meltblowing apparatus and the moving substrate, the

5 filament having a predominant vacillation amplitude non-parallel to a direction of the moving substrate.

S2

S1

123. The system of Claim 122, the filament having a predominant vacillation amplitude substantially transverse to a direction of the moving substrate.

S3

S1

124. The system of Claim 122, the filament having a substantially periodic vacillation.

S4

S1

125. The system of Claim 122, the vacillation amplitude of the filament greater toward the moving substrate.

5 Rule 126 A2 Cont

§5  
126. The system of Claim 122, the meltblowing apparatus comprising a body member having a first fluid orifice and two separate second fluid orifices disposed on substantially opposing sides of the first fluid orifice, the first fluid orifice protruding relative to the second fluid orifices, the first and second fluid orifices formed by respective corresponding fluid conduits disposed non-convergently in the body member, the first and second fluid orifices aligned non-parallel to the direction of the moving substrate.

§6  
127. The system of Claim 126, the first and second fluid orifices aligned substantially transversely to the direction of the moving substrate.

§7  
128. The system of Claim 126, the filament emanating from the first fluid orifice, the predominant vacillation amplitude of the filament between the second fluid orifices on opposing sides of the first fluid orifice.

§8  
129. The system of Claim 122, a plurality of filaments between the meltblowing apparatus and the moving substrate, at least some of the plurality of filaments having a predominant vacillation amplitude non-parallel to the direction of the moving substrate.

§9  
130. The system of Claim 129, at least some of the plurality of filaments having a predominant vacillation amplitude substantially transverse to the direction of the moving substrate.

60 131. The system of Claim 129, at least some of the plurality of filaments having a substantially periodic vacillation.

Rule 126 A2 Cont 61 58 132. The system of Claim 129, the vacillation amplitude of the plurality of filaments greater toward the moving substrate.

62 58 133. The system of Claim 129, the meltblowing apparatus comprising a body member having a plurality of first fluid orifices and a plurality of second fluid orifices, the plurality of first fluid orifices protruding relative to the plurality of second fluid orifices, the plurality of first fluid orifices each flanked on substantially opposing sides by two separate second fluid orifices, the plurality of first fluid orifices and the plurality of second fluid orifices are formed by respective corresponding fluid conduits disposed non-convergently in the body member, at least some of the plurality of first and second fluid orifices aligned non-parallel to the direction of the moving substrate.

63 62 134. The system of Claim 133, at least some of the plurality of first and second fluid orifices aligned substantially transversely to the direction of the moving substrate.

64 62 135. The system of Claim 133, the plurality of filaments emanating from a corresponding one of the plurality of first fluid orifices, the predominant vacillation amplitude of each filament is between the two second fluid orifices disposed on substantially opposing sides of the corresponding first fluid orifice.

<sup>65</sup>  
136. The system of Claim ~~133~~<sup>62</sup>, a plurality of at least two meltblowing apparatuses positioned adjacently, at least some of the plurality of first and second fluid orifices of each meltblowing apparatus aligned with at least some of the plurality of first and second fluid orifices of an adjacent meltblowing apparatus.

<sup>66</sup>  
137. The system of Claim ~~136~~<sup>62</sup>, the body member comprising a plurality of laminated members including at least two plates.

<sup>67</sup>  
138. A meltblowing apparatus comprising:  
a first fluid orifice in a body member;  
two second fluid orifices in the body member, the two second fluid orifices disposed symmetrically on substantially opposite sides of the first fluid orifice,  
the first and second fluid orifices each have a corresponding fluid conduit disposed in the body member,  
two portions of the body member proximate the first fluid orifice devoid of fluid orifices, the two portions of the body member devoid of fluid orifices disposed symmetrically on substantially opposite sides of the first fluid orifice between the two second fluid orifices.

<sup>68</sup>  
139. The apparatus of Claim ~~138~~<sup>67</sup> further comprising in combination therewith a filament emanating from the first fluid orifice, the filament having a major vacillation amplitude between the two second fluid orifices on substantially opposite sides of the first fluid orifice.

<sup>69</sup> 140. The apparatus of Claim <sup>68</sup> 139, the filament having a minor vacillation amplitude between the portions of the body member devoid of fluid orifices.

<sup>70</sup> 141. The apparatus of Claim <sup>67</sup> 138, the first and second fluid orifices disposed on a fluid dispensing face of the body member.

<sup>71</sup> 142. The apparatus of Claim <sup>70</sup> 141, the first fluid orifice protrudes relative to the second fluid orifices.

<sup>72</sup> 143. The apparatus of Claim <sup>67</sup> 138,  
a plurality of first fluid orifices in the body member and a plurality of second fluid orifices in the body member,  
the plurality first and second fluid orifices each have a corresponding fluid conduit disposed in the body member,  
each first fluid orifice having two second fluid orifices disposed symmetrically on substantially opposite sides thereof,  
two portions of the body member proximate each first fluid orifice devoid of fluid orifices, the two portions of the body member devoid of fluid orifices disposed symmetrically on substantially opposite sides of the corresponding first fluid orifice between the two second fluid orifices on substantially opposite sides thereof.

<sup>73</sup> 144. A meltblowing apparatus comprising:  
a first fluid orifice in a body member;

5 two second fluid orifices in the body member, the two second fluid orifices disposed symmetrically on not more than two substantially opposite sides of the first fluid orifice,

the first and second fluid orifices each have a corresponding fluid conduit disposed in the body member.

Rule  
126  
A2  
74 73  
145. The apparatus of Claim 144, two portions of the body member proximate the first fluid orifice devoid of fluid orifices, the two portions of the body member devoid of fluid orifices disposed symmetrically on substantially opposite sides of the first fluid orifice between the two second fluid orifices.

75 73  
146. The apparatus of Claim 144,  
a plurality of first fluid orifices in the body member and a plurality of second fluid orifices in the body member,

5 the plurality first and second fluid orifices each have a corresponding fluid conduit disposed in the body member,

each first fluid orifice having two second fluid orifices disposed symmetrically on not more than two substantially opposite sides thereof.

76 75  
147. The apparatus of Claim 146, two portions of the body member proximate each first fluid orifice devoid of fluid orifices, the two portions of the body member devoid of fluid orifices disposed symmetrically on substantially opposite sides of the corresponding first fluid orifice between the two second fluid orifices on substantially opposite sides thereof.